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Date: November 2, 2006/Casey L. Martin/

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Appellants: Steven M. Zink, *et al.*

Examiner: Lan Dai Thi Truong

Serial No: 10/092,323

Art Unit: 2132

Filing Date: March 6, 2002

Title: SYSTEM AND METHODOLOGY PROVIDING OPTIMIZED DATA EXCHANGE
WITH INDUSTRIAL CONTROLLER

Mail Stop Appeal Brief-Patents
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APPEAL BRIEF

Dear Sir:

Appellant's submits this brief in connection with an appeal of the above-identified patent application. A credit card payment form is filed concurrently herewith in connection with all fees due regarding this appeal brief. In the event any additional fees may be due and/or are not covered by the credit card, the Commissioner is authorized to charge such fees to Deposit Account No. 50-1063 [ALBRP284US].

I. Real Party in Interest (37 C.F.R. §41.37(c)(1)(i))

The real party in interest in the present appeal is Rockwell Software, Inc., the assignee of the present application.

II. Related Appeals and Interferences (37 C.F.R. §41.37(c)(1)(ii))

Appellants', appellants' legal representative, and/or the assignee of the present application are not aware of any appeals or interferences which may be related to, will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of Claims (37 C.F.R. §41.37(c)(1)(iii))

Claims 1-7, 9-22 and 24-39 stand rejected by the Examiner. The rejection of claims 1-7, 9-22 and 24-39 is being appealed. Claims 8 and 23 have been cancelled.

IV. Status of Amendments (37 C.F.R. §41.37(c)(1)(iv))

No amendments have been made after the Final Office Action (dated April 27, 2006).

V. Summary of Claimed Subject Matter (37 C.F.R. §41.37(c)(1)(v))**A. Independent claim 1**

Independent claim 1 recites an industrial control system, comprising in part a primary aggregation component 80 associated with an industrial controller 30. The primary aggregation component 80 aggregates one or more selected data items into an aggregated subset of data items, wherein the primary aggregation component 80 is defined and installed by an entity remote from the controller 40. The subject claim further comprises a communications component 44 that transmits the subset of data items *via* a singular communications packet across a network and adds at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations. (*See, e.g.* Figure 1, and corresponding text, page 7, line 10 – page 9, line 7).

B. Independent claim 21

Independent claim 21 recites a method to facilitate data communications with an industrial controller. The method first comprises requesting tag information from a controller 30 and building an object 80 from the tag information provided by the controller 30. The object 80 is subsequently installed on the controller 30. Updating object data on the controller 30 and adding data items of interest to the object, the data items arranged according to at least one of contiguous and non-contiguous address memory locations are achieved. Moreover, a client application receives data from the object 80 that has been updated by the controller 30. (*See, e.g.* Figure 1, and corresponding text, page 7, line 10 – page 9, line 7).

C. Dependent claim 30

Dependent claim 30 recites the method of claim 29, further comprising employing handle information to update memory locations on the controller, which, for example, allows a remote application to receive handle information relating to one or more data items of interest from the controller, and subsequently allows the remote application to locally update the data items and employ the handle information to transmit the updates to the controller. (*See, e.g.* Figure 9, and corresponding text, page 16, line 18 – page 17, line 9).

D. Independent claim 31

Independent claim 31 recites a system to facilitate data communications with an industrial controller, comprising means for requesting tag identifiers from a controller 30 (*See, e.g.* Figure 1, and corresponding text, page 8, lines 4-16); means for constructing an optimized data packet 214 from the tag identifiers requested from the controller 212 (*See, e.g.* Figure 3, and corresponding text, page 10, lines 17-26); means for installing the optimized data packet 214 on the controller 212 (*See, e.g.* Figure 3, and corresponding text, page 10, lines 17-26); means for refreshing the optimized data packet 214 on the controller 212 (*See, e.g.* Figure 3, and corresponding text, page 11 lines 3-16); means for adding data items of interest to the data packet, the data items arranged according to at least one of contiguous and non-contiguous address memory locations (*See, e.g.* Figure 6, and corresponding text, page 14, line 27 – page 15, line 17); and means for transmitting data from the optimized data packet 214 that has been refreshed by the controller 212 (*See, e.g.* Figure 3, and corresponding text, page 11, lines 3-16).

The aforementioned means for limitations are identified as claim elements subject to the provisions of 35 U.S.C. §112 ¶6. The corresponding structures are identified with reference to the specification and drawings in the parentheticals above corresponding to those claim limitations.

E. Independent claim 32

Independent claim 32 recites a signal to facilitate communications between a client application 40 and an industrial controller 30, the signal comprising a data packet including aggregated information relating to one or more data items in an industrial controller, the one or more data items including tag and value information generated from an object installed on the controller 30 and arranged according to at least one of contiguous and non-contiguous address memory locations, the aggregated information transmitted *via* a singular communications packet to mitigate transmission of superfluous network data. (*See, e.g.* Figure 1, and corresponding text, page 7, line 10 – page 9, line 7).

F. Independent claim 33

Independent claim 33 recites an industrial controller 30, comprising a first component that processes information received from a remote entity 40. The industrial controller further comprises a primary aggregation component 80 that aggregates one or more selected data items into an aggregated subset of data items, the primary aggregation component 80 defined and installed by an entity 40 remote from the industrial controller 30, and a communications component 44 that transmits the subset of data items *via* a singular communications packet across a network and adds at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations. (*See, e.g.* Figure 1, and corresponding text, page 7, line 10 – page 9, line 7).

VI. Grounds of Rejection to be Reviewed on Appeal (37 C.F.R. §41.37(c)(1)(vi))

A. Whether claims 1, 2, 4, 5, 9, 18-20 and 33-35 are unpatentable under 35 U.S.C. §103(a) over Runyon *et al.* (E.P. 1 104 141) in view of Graves *et al.* (US 2002/0191250).

B. Whether claims 6, 7 and 16 are unpatentable under 35 U.S.C. §103(a) over

Runyon *et al.*, in view of Graves *et al.* and in further view of Bowman-Amuah (US 6,640,244).

C. Whether claim 10 is unpatentable under 35 U.S.C. §103(a) over Runyon *et al.*, in view of Graves *et al.* and further in view of Su *et al.* (US 6,625,161).

D. Whether claims 11-13, 15 and 17 are unpatentable under 35 U.S.C. §103(a) over Runyon *et al.*, in view of Graves *et al.* and in further view of Bonneau *et al.* (US 6,657,955).

E. Whether claim 14 is unpatentable under 35 U.S.C. §103(a) over Runyon *et al.*, Graves *et al.* Bonneau, *et al.* and in further view of Bhatt *et al.* (US 6,097,399).

F. Whether claim 3 is unpatentable under 35 U.S.C. §103(a) over Runyon *et al.*, Graves *et al.* and further in view of Bhatt *et al.*

G. Whether claims 21-24 and 27-32 are unpatentable under 35 U.S.C. §103(a) over Bowman-Amuah in view of Wang *et al.* (US 6,970,921).

H. Whether claims 25 and 26 are unpatentable under 35 U.S.C. §103(a) over Bowman-Amuah, Wang *et al.* and in further view of Graves *et al.*

I. Whether claim 36 is unpatentable under 35 U.S.C. §103(a) as being unpatentable over Bowman Amuah, Wang *et al.* and in further view of Smith-Semedo *et al.* (US 6,877,010).

VII. Argument (37 C.F.R. §41.37(c)(1)(vii))

A. Rejection of Claims 1, 2, 4, 5, 9, 18-20 and 33-35 Under 35 U.S.C. §103(a)

Claims 1, 2, 4, 5, 9, 18-20 and 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.* (E.P. 1 104 141) in view of Graves *et al.* (US 2002/0191250). Reversal of this rejection is requested for at least the following reasons. Neither Runyon *et al.* nor Graves *et al.*, teach or suggest all limitations of the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations*. See MPEP §706.02(j). The teaching or suggestion to

make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed invention relates to facilitating optimized data transfers between an industrial controller and one or more remote client applications. In particular, independent claims 1 and 33 recite similar aspects, namely an industrial control system comprising a primary aggregation component associated with an industrial controller, the primary aggregation component aggregates one or more selected data items into an aggregated subset of data items, ***the primary aggregation component defined and installed by an entity remote from the controller.*** Runyon *et al.* and Graves *et al.*, either alone or in combination, fail to disclose or suggest such recited features.

Runyon *et al.* teaches a system that generates composite packets for transmission over an internet protocol network. Data communications originating from multiple customer equipments but intended to reach a single destination are processed and combined into a composite packet for transmission over an IP network. In the Advisory Action, the Examiner incorrectly asserts that Runyon *et al.* teaches a ***primary aggregation component defined and installed by an entity remote from an industrial controller***, as recited by claims 1 and 33. At the indicated portions, the reference teaches a composite packet generation system that aggregates a plurality of data packets into a single packet and assigns a protocol header to facilitate transmission. However, the reference does not provide the mechanism of aggregating data that the claimed invention provides through an aggregation component that is defined and installed by an entity that is remote from the industrial controller. In particular, for example, the claimed invention allows a remote entity to specify desired data items to be retrieved from the industrial controller and collected at the remote entity-defined aggregation component, while the cited reference merely aggregates data packets and facilitates transmission of a single bulk data packet. Nowhere does the reference further teach or suggest that the aggregated data packets comprise data that a remote entity identified for collection.

The Examiner attempts to compensate for deficiencies of Runyon *et al.* with Graves *et al.* Graves *et al.* provides a communication network for a metropolitan area comprised of three types of nodes. Graves *et al.* does not teach or suggest aggregating remote entity-defined data items at

an industrial controller. Consequently, Graves *et al.* fails to provide the optimized transmission of desired data as afforded by the claimed invention *via a primary aggregation component defined and installed by an entity remote from an industrial controller.*

In view of at least the foregoing, it is readily apparent that Runyon *et al.* and Graves *et al.*, either alone or in combination, fail to teach or suggest each and every element set forth in the subject claims. Accordingly, this rejection should be reversed.

B. Rejection of Claims 6, 7 and 16 Under 35 U.S.C. §103(a)

Claims 6, 7 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, in view of Graves *et al.* and in further view of Bowman-Amuah (US 6,640,244). This rejection should be reversed for at least the following reasons. Claims 6, 7 and 16 depend from independent claim 1. As discusses *supra*, Runyon *et al.* and Graves *et al.* fail to teach or suggest all features of independent claim 1, and Bowman-Amuah fails to compensate for the aforementioned deficiencies of the primary references. Accordingly, this rejection should be reversed.

C. Rejection of Claim 10 Under 35 U.S.C. §103(a)

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, in view of Graves *et al.* and further in view of Su *et al.* (US 6,625,161). Reversal of this rejection is requested for at least the following reasons. The cited references, individually or in combination, do not teach or suggest each and every element set forth in the subject claim. In particular, Su *et al.* does not make up for the deficiencies of Runyon *et al.* and Graves *et al.* with respect to independent claim 1 (from which claim 10 depends). Thus, it is respectfully submitted that this rejection be reversed.

D. Rejection of Claims 11-13, 15 and 17 Under 35 U.S.C. §103(a)

Claims 11-13, 15 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, in view of Graves *et al.* and in further view of Bonneau *et al.* (US 6,657,955). Reversal of this rejection is requested for at least the following reasons. Runyon *et al.*, Graves *et al.* and Bonneau *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Bonneau *et al.* does not make up

for the deficiencies of the primary references with respect to independent claim 1 (from which claims 11-13, 15 and 17 depend from). Therefore, reversal of this rejection is respectfully requested.

E. Rejection of Claim 14 Under 35 U.S.C. §103(a)

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, Graves *et al.* Bonneau, *et al.* and in further view of Bhatt *et al.* (US 6,097,399). Reversal of this rejection is requested for at least the following reasons. The cited references, either alone or in combination, fail to teach or suggest all features set forth in the subject claim. In particular, Bhatt *et al.* does not make up for the aforementioned deficiencies of Runyon *et al.*, Graves *et al.* and Bonneau *et al.* with respect to independent claim 1 (from which claim 14 depends from). Accordingly, this rejection should be reversed.

F. Rejection of Claim 3 Under 35 U.S.C. §103(a)

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, Graves *et al.* and further in view of Bhatt *et al.* This rejection should be reversed for at least the following reasons. The cited documents, individually or in combination, do not teach or suggest each and every element set forth in the subject claim. In particular, Bhatt *et al.* does not make up for the aforementioned deficiencies of the primary references with respect to independent claim 1 (from which claim 3 depends from). Therefore, appellants' representative respectfully requests that this rejection be reversed.

G. Rejection of Claims 21-24 and 27-32 Under 35 U.S.C. §103(a)

Claims 21-24 and 27-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bowman-Amuah in view of Wang *et al.* (US 6,970,921). Reversal of this rejection is requested for at least the following reasons. Neither Bowman-Amuah nor Wang *et al.* teach or suggest all aspects set forth in the subject claims.

Independent claims 21 recites a method to facilitate data communications with an industrial controller, comprising *requesting tag information from a controller; building an object from the tag information provided by the controller; installing the object on the controller; updating object data on the controller.* Independent claims 31 and 32 recite similar

features. Bowman-Amuah and Wang *et al.* are silent regarding such aspects set forth in the subject claims.

Bowman-Amuah provides a system for batching logical requests for reducing network traffic in a transaction services environment. In the Advisory Action, the Examiner contends that the grouping of streams of data packets into an associated queue based on an identified predetermined common attribute as taught by Bowman-Amuah equates to the features afforded by independent claims 21, 31 and 32. Appellants' representative respectfully disagrees. Rather than performing the rudimentary task of organizing data packets according to a common attribute as in the cited reference, the claimed invention allows a remote application to build and subsequently install an object at an industrial controller that allows for aggregation and updating of desired data items. Thus, Bowman-Amuah is directed towards organizing previously collected data according to an identified attribute while the claimed invention identifies attributes in order to facilitate collection of desired data. Consequently, the cited reference is silent regarding *requesting tag information from a controller; building an object from the tag information provided by the controller; installing the object on the controller; updating object data on the controller*, as in the claimed invention.

The Examiner attempts to compensate for the deficiencies of Bowman-Amuah with Wang *et al.* Wang *et al.* employs network interface cards with multiple virtual paths in order to manage network traffic. However, nowhere does Wang *et al.* construct an object based on tag information associated with desired data items to facilitate single transmission of the desired data items to the requesting remote entity. Consequently, Wang *et al.* is silent regarding *requesting tag information from a controller, building an object from the tag information provided by the controller, installing the object, updating the object data, adding data items of interest to the object, the data items arranged according to at least one of contiguous and non-contiguous address memory locations and receiving data from the object that has been updated by the controller*, as in the claimed invention.

Moreover, the cited references do not teach or suggest *employing handle information to update memory locations on the controller*, as recited in claim 30. In the Advisory Action, the Examiner incorrectly states that the ability of Bowman-Amuah to subsequently add data packets to the queue equates to *employing handle information to update memory locations on the controller*, as afforded by claim 30. The claimed invention, for example, allows a remote

application to receive handle information relating to one or more data items of interest from the controller, and subsequently allows the remote application to locally update the data items and employ the handle information to transmit the updates to the controller. To the contrary, Bowman-Amuah allows the queue of aggregated data packets to be expanded with additional data packets. Furthermore, since neither Bowman-Amuah nor Wang *et al.* teach constructing an object at the industrial controller based on tag information associated with data items desired by a remote entity, the cited references are further silent with regard to employing the updating procedure as afforded by claim 30.

In view of at least the foregoing, it is readily apparent that Bowman-Amuah and Wang *et al.*, either alone or in combination, fail to teach or suggest each and every element set forth in the subject claims. Accordingly, this rejection with respect to independent claims 1, 21 and 32 (and the claims that depend there from) should be reversed.

H. Rejection of Claims 25 and 26 Under 35 U.S.C. §103(a)

Claims 25 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bowman-Amuah, Wang *et al.* and in further view of Graves *et al.* Reversal of this rejection is requested for at least the following reasons. As discussed *supra* with regard to independent claim 21, neither Bowman-Amuah nor Wang *et al.*, individually or in combination, teach or suggest all aspects recited in the subject claims. Graves *et al.* does not make up for the deficiencies of Bowman-Amuah and Wang *et al.* with respect to independent claim 21 (from which claims 25 and 26 depend from). Thus, it is respectfully submitted that this rejection be reversed.

I. Rejection of Claim 36 Under 35 U.S.C. §103(a)

Claim 36 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Bowman Amuah, Wang *et al.* and in further view of Smith-Semedo *et al.* (US 6,877,010). Reversal of this rejection is requested for at least the following reasons. The cited references, individually or in combination, do not teach or suggest all aspects recited in the subject claims. In particular, Smith-Semedo *et al.* does not make up for the aforementioned deficiencies of Bowman-Amuah and Wang *et al.* Therefore, this rejection should be reversed.

D. Conclusion

For at least the above reasons, the claims currently under consideration are believed to be patentable over the cited references. Accordingly, it is respectfully requested that the rejections of claims 1-7, 9-22 and 24-39 be reversed.

If any additional fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP284US].

Respectfully submitted,
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VIII. Claims Appendix (37 C.F.R. §41.37(c)(1)(viii))

1. (Currently Amended) An industrial control system, comprising:
a primary aggregation component associated with an industrial controller,
the primary aggregation component aggregates one or more selected data items into an aggregated subset of data items, the primary aggregation component defined and installed by an entity remote from the controller; and
a communications component that transmits the subset of data items *via* a singular communications packet across a network and adds at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations.
2. (Currently Amended) The system of claim 1, the entity is a client application that selects and requests the subset of data items from the controller.
3. (Original) The system of claim 2, the client application is at least one of a data logging application and a Human and Machine Interface (HMI) that interacts with the industrial controller.
4. (Original) The system of claim 2, further comprising a communications server adapted to interact with the client application, the network and the industrial controller, the industrial controller including a communications driver to interface with the communications server and the network.
5. (Currently Amended) The system of claim 1, the communications component sends a data request to the industrial controller relating to the subset of data items.
6. (Original) The system of claim 5, the industrial controller sending a response to the request including at least one of tag and value information associated with the tag, the tag and value information relating to the subset of data items.

7. (Currently Amended) The system of claim 6, the communications component employing the tag and value information received in the response to build the primary aggregation component on the industrial controller.
8. (Cancelled)
9. (Currently Amended) The system of claim 1, further comprising removing the one or more secondary aggregation components based upon decreased data demands.
10. (Currently Amended) The system of claim 1, further comprising at least one of dynamically increasing and decreasing the amount of selected data items in the primary aggregation component based upon data demands received from the network.
11. (Currently Amended) The system of claim 1, the primary aggregation component is an object including at least one of class attributes, instance attributes, services and a data buffer.
12. (Original) The system of claim 11, the class attributes supply information such as revision level information of the object, an instance number, and a number of instances of an associated class.
13. (Original) The system of claim 11, the instance attributes include setting for at least one of object update times, event triggers, whether to update the object based on rate, demand and other criteria, where in a data stream triggers are located, whether to continue on an overflow, number of drivers currently installed, timestamp information, size of buffers, start times, and object lifetime settings.
14. (Original) The system of claim 11, the services include at least one of Get All Attributes, Get All List, Set Attributes List, Reset, Start, Stop, Create Object and Delete Object.

15. (Original) The system of claim 11, the data buffer including at least one of 1 to L data items, L being an integer, and includes at least one of the following types: single valued elements, bit, byte, 16 bit, 32 bit, greater than 32 bit configurations, unsigned integers, signed integers, floating point elements, single dimension array, multiple dimension array configurations, and user defined tags (UDT).
16. (Original) The system of claim 15, the single valued elements include at least one of a tag identifier and an associated value.
17. (Original) The system of claim 15, the single dimension arrays include at least one of an array element ID, a value, a begin array element ID and a length.
18. (Currently Amended) The system of claim 1, further comprising removing the primary aggregation component based upon at least one of a loss of communications and a connection timeout.
19. (Currently Amended) The system of claim 1, further comprising removing the primary aggregation component based upon an explicit command.
20. (Original) The system of claim 1, further comprising at least one of receiving handle information from the industrial controller relating to the selected data items and employing the handle information to update data locations in the industrial controller.

21. (Currently Amended) A method to facilitate data communications with an industrial controller, comprising:
- requesting tag information from a controller;
 - building an object from the tag information provided by the controller;
 - installing the object on the controller;
 - updating object data on the controller;
 - adding data items of interest to the object, the data items arranged according to at least one of contiguous and non-contiguous address memory locations; and
 - receiving data from the object that has been updated by the controller.
22. (Original) The method of claim 21, further comprising interacting with the controller over a network connection.
23. (Cancelled)
24. (Original) The method of claim 21, further comprising updating the object *via* at least one of a periodic occurrence, an event driven occurrence, and a request.
25. (Original) The method of claim 21, further comprising removing the object from the controller when a client no longer requests data items of interest.
26. (Original) The method of claim 25, further comprising removing the object based upon at least one of an event and network connections being disrupted for a time period that is greater than a predetermined amount of time that is configured at the controller.
27. (Original) The method of claim 21, further comprising placing data items of interest in a scanning list.
28. (Original) The method of claim 27, the list indicates which data items are to be periodically updated for a client application.

29. (Original) The method of claim 21, further comprising receiving handle information relating to one or more data items of interest from the controller.
30. (Original) The method of claim 29, further comprising employing the handle information to update memory locations on the controller.
31. (Currently Amended) A system to facilitate data communications with an industrial controller, comprising:
- means for requesting tag identifiers from a controller;
 - means for constructing an optimized data packet from the tag identifiers requested from the controller;
 - means for installing the optimized data packet on the controller;
 - means for refreshing the optimized data packet on the controller;
 - means for adding data items of interest to the data packet, the data items arranged according to at least one of contiguous and non-contiguous address memory locations; and
 - means for transmitting data from the optimized data packet that has been refreshed by the controller.
32. (Currently Amended) A signal to facilitate communications between a client application and an industrial controller, the signal comprising:
- a data packet including aggregated information relating to one or more data items in an industrial controller, the one or more data items including tag and value information generated from an object installed on the controller and arranged according to at least one of contiguous and non-contiguous address memory locations, the aggregated information transmitted *via* a singular communications packet to mitigate transmission of superfluous network data.

33. (Currently Amended) An industrial controller, comprising:
a first component that processes information received from a remote entity;
a primary aggregation component that aggregates one or more selected data items into an aggregated subset of data items, the primary aggregation component defined and installed by an entity remote from the industrial controller; and
a communications component that transmits the subset of data items *via* a singular communications packet across a network and adds at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations.
34. (Original) The controller of claim 33, the first component is a processor adapted to provide access to a variable memory associated with the controller, the variable memory storing the one or more selected data items.
35. (Original) The controller of claim 34, the processor interacts with the communications component to aggregate and transmit the subset of data items, the communications component is a communications driver configured for the network.
36. (Original) The controller of claim 35, the network is at least one of an Ethernet, ControlNet, a DeviceNet, RS-232, RS-422, RS-485.
37. (Original) The controller of claim 35, the communications driver adapted to communicate with a communications server associated with a client application.
38. (Original) The controller of claim 37, the client application is a Human and Machine Interface (HMI).
39. (Original) The controller of claim 37, the communications server installs the aggregation component on the industrial controller.

IX. Evidence Appendix (37 C.F.R. §41.37(c)(1)(ix))

None.

X. Related Proceedings Appendix (37 C.F.R. §41.37(c)(1)(x))

None.